

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,257	10/748,257 12/31/2003		Keiko Hayami	OKI 397	6988
23995	7590	03/25/2005		EXAMINER	
RABIN &	Berdo, PO	C	POTTER, ROY KARL		
1101 14TH	STREET.	NW			
SUITE 500				ART UNIT	PAPER NUMBER
	WASHINGTON, DC 20005				

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

ر اک

	Application No.	Applicant(s)				
	10/748,257	HAYAMI, KEIKO				
Office Action Summary	Examiner	Art Unit				
	Roy K. Potter	2822				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) □ Responsive to communication(s) filed on 2a) □ This action is FINAL. 2b) □ This action is non-final. 3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
 4) Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 9-13 and 15-18 is/are allowed. 6) Claim(s) 1-6 is/are rejected. 7) Claim(s) 7-8 and 14 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 						
Application Papers						
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Cheer:						

Application/Control Number: 10/748,257

Art Unit: 2822

DETAILED ACTION

Claims 1 – 18 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 – 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Kanemoto et al..

Kanemoto et al., U.S. Patent No. 6,410,987 discloses a semiconductor device, which, as shown in the embodiment of Figure 1 is a multichip package. A first rectangular chip 3 on which a plurality of bonding pads 4 on a first face and a second face opposite the first face. A rectangular second chip 2 is mounted on the face of chip 3, as explained in column 9, beginning at line 42. A plurality of leads located around the periphery of the chips are electrically connected to the bonding pads 4 on chips 2 and 3 by bonding wires 8. An auxiliary lead 6a supports the first chip 3 at a corner of the first chip. A resin encapsulant 9 seals the auxiliary lead and the semiconductor chips and parts of the leads. The part of the auxiliary lead that extends away for the chip extends along a diagonal as seen in the lower left corner of the package. The auxiliary lead has a plurality of diverging portions.

Allowable Subject Matter

Claims 7 - 8 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not teach the auxiliary lead becoming gradually thick toward the outside of the semiconductor chip as recited in claim 7.

The prior art does not disclose that the auxiliary lead is covered with an insulating protection film.

The prior art does not disclose the first face of the two chips facing each other as recited in claim 14.

Claims 9 - 13 and 15 - 18 are allowed.

The prior art does not disclose an auxiliary frame that supports both a region surrounding corners of a first chip and an outer periphery of a second chip

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy K. Potter whose telephone number is 571 272

1842. The examiner can normally be reached on M-F.

Application/Control Number: 10/748,257 Page 4

Art Unit: 2822

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roy K Potter Primary Examiner Art Unit 2822